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**BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Application Number: 10/067,843
Filing Date: February 08, 2002
Appellant(s): IWANO ET AL.

Andrew L. Dunlap
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 8/10/2009 appealing from the Office action mailed 3/6/2009.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

6,283,761 Joao 9,2001

Califano, US. Patent Publication No. 2003/0039362 A1

Felsher, US. Patent Publication No. 2002/0010679 A1

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joao (hereinafter Joao) (U.S. Patent No. 6,283,761 B1), Califano et al. (hereinafter Califano) (U.S. Patent Publication No. 2003/0039362 A1) and further in view of Felsher (US 2002/0010679 A1).

As per claim 1, Joao discloses a medical information system comprising:

i. a patient server comprising a first database, said patient server receiving vital information and unique identifications allocated to patients, storing and managing the received vital information and unique identifications in said first database such that the vital information is associated with a corresponding unique identification (Joao: col. 12, lines 50-67; col. 13, lines 38-51; col. 14, lines 49-67; col. 15, lines 1-17; col. 16, lines 38-65; col. 23, lines 48-60; Fig. 1), and such that correspondence between each of the unique identification and patient data, wherein the patient data

includes at least a patient name, is unrecognizable, and transmitting the stored and managed vital information and unique identifications;

ii. a medical care provider server connected to said patient server through a first network, and comprising a second database, said medical care provider server receiving the vital information, and unique identifications from said first database of said patient server through the first network, storing and managing the received vital information, unique identifications, and patient data in said second database, associate each of the unique identifications with corresponding patient data, identifying corresponding patient data using each of the unique identifications, and allowing the stored and managed vital information, unique identifications, and patient data to be browsed (Joao: col. 12, lines 50-67; col. 13, lines 1- 7 and 38-51; col. 14, lines 49-67; col. 15, lines 1-17; col. 23, lines 48-60; Fig. 1);

iii. a patient terminal connected to said patient server through a network, said patient terminal transmitting the vital information and unique identifications to said patient server through the network (Joao: col. 12, lines 50-57; col. 13, lines 38-51; col. 14, lines 49-67; col. 15, lines 1-17; col. 23, lines 48-60; Fig. 1); and

iv. a doctor terminal connected to said medical care provider server through a network, said doctor terminal browsing the vital

information, unique identifications, and patient data stored and managed in the medical care provider server through the network (Joao: col. 12, lines 57-67; col. 13, lines 1-7 and 38-51; col. 14, lines 49-67; col. 15, lines 1-17; col. 23, lines 48-60; Fig. 1).

v. wherein the first network is configured to allow communication between said patient server and said medical care provider server and disallow communication between either said patient terminal or said doctor terminal and either said patient server or said medical care provider server, and disallow communication between said patient terminal and said doctor terminal (Joao: col. 13, lines 42-45; col. 15, lines 54-58; col. 40, lines 51-60),

vi. wherein the second network is configured to allow communication between said patient terminal and said patient server, and disallow communication among said patient server, said medical care provider server, and said doctor terminal (Joao: col. 13, lines 42-45; col. 15, lines 54-58; col. 40, lines 51-60), and

vii. wherein the third network is configured to allow communication between said doctor terminal and said medical care provider server, and disallow communication among said patient server, said medical care provider server, and said patient terminal (Joao: col. 13, lines 42-45; col. 15, lines 54-58; col. 40, lines 51-60).

- Joao fails to expressly teach that correspondence between each of the unique identification and patient data, wherein the patient data includes at least a patient name, is unrecognizable, and transmitting the stored and managed vital information and unique identifications. However, this feature is well known in the art, as evidenced by Califano.

  In particular, Califano discloses correspondence between each of the unique identification and patient data, wherein the patient data includes at least a patient name, is unrecognizable, and transmitting the stored and managed vital information and unique identifications (Califano; abstract, par. 0010).

  It would have been obvious to one having ordinary skill in the art at the time of the invention to include the aforementioned limitation as disclosed by Califano with the motivation of to protect confidential information of patients (Califano; par. 0010).

- Joao fails to expressly disclose a medical information system comprising: second and third networks. However, these features are notoriously well known in the art, as evidenced by Felsher.

In particular, Felsher discloses a medical information system according to claim 1, further comprising: second and third networks (Felsher; abstract; Fig. 1).

Examiner also notes that Joao does teach a system having a single computer or system of computers and/or may include a plurality of computers or computer systems (i.e., networks) that are utilized in conjunction with one another (i.e., the systems are networked together) (Joao: col. 13, lines 42-45). As such, Examiner considers a broad yet reasonable interpretation of Joao to also teach Applicant's recitation of multiple networks interconnected within a larger network.

One of ordinary skill would have found it obvious at the time of the invention to combine the teachings of Felsher with the teachings of Joao with the motivation of providing a secure system for exchanging confidential information (Felsher; abstract).

As per claim 3, Joao discloses a medical information system according to claim 1, further comprising a sensor for measuring vital data, wherein the vital information includes a measurement value by said sensor (Joao: col. 23, lines 47-61).

As per claim 4, Joao discloses a medical information system according to claim 1, wherein:

i. said doctor terminal transmits, as consultation data, an inquiry regarding a health status of a patient to said medical care provider server through the network (Joao: col. 31, lines 65-67; col. 32, lines 1-47; Fig. 1); and

ii. the vital information transmitted from said patient terminal to said patient server through the network includes a reply to the inquiry transmitted to said patient terminal (Joao: col. 31, lines 65-67; col. 32, lines 1-47; Fig. 1).

- Joao fails to expressly disclose a medical information system according to claim 1, wherein: the system comprises second and third networks. Nevertheless, these features are notoriously well known in the art, as evidenced by Felsher.

  In particular, Felsher discloses a medical information system according to claim 2, wherein: system comprises second and third networks (Felsher; abstract; Fig. 1). Examiner also notes, however, that Joao does teach a system having a single computer or system of computers and/or may include a plurality of computers or computer systems (i.e., networks) that are utilized in conjunction with one another (i.e., the systems are networked together) (Joao: col. 13, lines 42-45). As such, Examiner considers a broad yet reasonable interpretation of Joao

to also teach Applicant's recitation of multiple networks interconnected within a larger network.

One of ordinary skill would have found it obvious at the time of the invention to combine the teachings of Felsher with the teachings of Joao with the motivation of providing a secure system for exchanging confidential information (Felsher abstract).

As per claim 5, Joao fails to expressly disclose a medical information system according to claim 1, further comprising:

i. a first unauthorized access prevention section provided in the first network.;

ii. a second unauthorized access prevention section provided in the second network;

iii. a third unauthorized access prevention section provided in the third network; and

iv. wherein said first and third unauthorized access prevention sections have higher security levels than a security level of said second unauthorized access prevention section.

Nevertheless, these features are old and well known in the art, as evidenced by Felsher. In particular, Felsher discloses a medical information system according to claim 1, further comprising: a first

unauthorized access prevention section provided in the first network (Felsher; ¶ [0197]); a second unauthorized access prevention section provided in the second network (Felsher; ¶ [0197]); a third unauthorized access prevention section provided in the third network (Felsher; ¶ [0197]); and wherein said first and third unauthorized access prevention sections have higher security levels than a security level of said second unauthorized access prevention section (Felsher; ¶ [0197]).

One of ordinary skill would have found it obvious at the time of the invention to combine the teachings of Felsher with the teachings of Joao with the motivation of providing a secure system for exchanging confidential information (Felsher; abstract).

Examiner notes also that Joao teaches the use of various authorization, security and encryption techniques, technologies, and methods (Joao: col. 15, lines 54-58; col. 40, lines 51-60).

As per claim 6, Joao fails to expressly disclose a medical information system according to claim 5, wherein:

i. said first unauthorized access prevention section comprises a firewall and a virtual private network;

ii. said second unauthorized access prevention section comprises a remote access server; and

iii. said third unauthorized access prevention section comprises a terminal authentication server.

Nevertheless, these features are old and well known in the art, as evidenced by Felsher. In particular, Felsher discloses a medical information system according to claim 5, wherein: said first unauthorized access prevention section comprises a firewall and a virtual private network (Felsher; ¶ [0228]); said second unauthorized access prevention section comprises a remote access server (Felsher; ¶ [0228]); and said third unauthorized access prevention section comprises a terminal authentication server (Felsher; ¶ [0228]).

Examiner notes also that Joao teaches the use of various authorization, security and encryption techniques, technologies, and methods (Joao: col. 15, lines 54-58; col. 40, lines 51-60) and therefore, Joao strongly suggests the aforementioned features above.

One of ordinary skill would have found it obvious at the time of the invention to combine the teachings of Felsher with the teachings of Joao with the motivation of providing a secure system for exchanging confidential information (Felsher abstract).

As claim 7, Joao discloses a medical information system according to claim 1, wherein the patient server and said medical care provider server are respectively clustered (Joao: abstract; col. 3, lines 33-53; Fig. 1).

Claims 8-17 substantially repeat the same limitations as those of claims 1, 3-7 and therefore, are rejected for the same reasons given for those claims and incorporated herein.

**(10) Response to Argument**

In the Appeal Brief filed 8/10/2009, Appellant makes the following arguments:

A) The combination of Joao and Califano fails to disclose the patient server that manages the vital information and unique identifications and such that the correspondence between each of the unique identification and patient data (including at least patient name) is unrecognizable;

B) The combination of Joao and Califano fails to disclose the medical care provider server connected to the patient server through the first network, such that the medical care provider server makes the vital data, unique identifications, and corresponding patient data (patient name) available;

C) The combination of Joao and Califano fails to disclose disallowing communication between the patient or doctor terminal and either the patient server or the medical care provider server.

D) Felsher teaches away from the invention Joao, since Felsher describes a medical security system including a database 6 that maintains patient medical history records separate from corresponding patient identification information contained in the index server 5.

Examiner will address Appellant's arguments in sequence as they appear in the brief.

Argument A:

In response to Appellant's first argument, The Examiner respectfully submits that claim recites: "a patient server comprising a first database, said patient server receiving vital information and unique identifications allocated to patients, storing and managing the received vital information and unique identifications in said first database such that the vital information is associated with a corresponding unique identification" and Joao teaches "The apparatus 100 also includes a patient or individual user communication device or computer 40 (hereinafter **"patient computer 40"**) which is associated with a healthcare patient such as a patient, user, or client who seeks or who is provided with healthcare and/or related services, products and/or related information. The patient communication device 40 can also be utilized by any individual, party, or entity, who or which may merely utilize the present invention in order to obtain information of interest." In col. 14, lines 12-21; "**Each of the central processing computer(s) 10, the provider computer(s) 20, the payer computer(s) 30, the patient computer(s) 40, and/or the intermediary computer(s) 50, can transmit information to, as well as receive information from, any of the computers 10, 20, 30, 40, and 50,** described herein. In this regard, each of the computers 10, 20, 30, 40, and 50, can communicate with, process information from, and/or share data and/or information with, each other and/or any other computer or computers 10, 20, 30, 40, and 50, described herein and/or utilized in conjunction with the present invention. In this manner, data and/or information transfer between any of the computers 10, 20, 30, 40, and 50, can communicate

with any other computer or computers 10, 20, 30, 40, and 50, in a bi-directional manner." in col. 14, lines 49-67; "The database 10H contains any and/or all of the information needed and/or required in order to perform any and/or all of the functions, services and/or operations described herein as being performed by the central processing computer 10 or the apparatus 100 of the present invention. In this regard **the database 10H contains data and/or information regarding patient name, patient identification information, patient social security number or other identification information**, date of birth, doctors or providers, therapists,… and any other data and/or information regarding the patient which would be needed and/or desired in order to perform any and/or all of the functions, services and/or operations described herein." In col. 16, lines 38-65.

Joao fails to expressly teach that "correspondence between each of the unique identification and patient data, wherein the patient data includes at least a patient name, is unrecognizable, and transmitting the stored and managed vital information and unique identifications.", however Califano teaches this feature by "assigning a virtual private identity (VPI) to participants" in abstract, and "…securely storing genetic and medical data, as well as other types of private information…secure database systems that may be employed to protect confidential medical information of participants in a medical study. For example, in such a study a large number of participants may submit personal medical information for the study and this information is to be kept secret. To this end, the systems and methods described herein include embodiments and practices wherein study participants register with the study, and upon registration are

assigned a virtual private identity (VPI). In one practice the VPI may comprise a random number, or some other type of **identifier that lacks any information that may be employed, in and of itself, to determine identity information, such as name** or social security number of the participant assigned the respective VPI." in par. 0010. The motivation to combine these references would be to protect confidential information of patients (Califano; par. 0010).

Appellant argues that the combination of Joao and Califano would result in the relationship between the patient's name and the patient's unique identification always being masked by the encrypted VPI to all users/portions of the system; Examiner respectfully submits that the claim recites "a patient server comprising a first database, said patient server receiving vital information and unique identifications allocated to patients, storing and managing the received vital information and unique identifications in said first database such that the vital information is associated with a corresponding unique identification", and Joao teaches a healthcare information apparatus and method that "a patient or individual user communication device or computer 40 (hereinafter "patient computer 40") which is associated with a healthcare patient such as a patient, user, or client who seeks or who is provided with healthcare and/or related services, products and/or related information"; "the database 10H contains data and/or information regarding patient name, patient identification information, patient social security number or other identification information"; and Califano teaches "a virtual private identity (VPI)… In one practice the VPI may comprise a random number, or some other type of identifier that lacks any information that

may be employed, in and of itself, to determine identity information, such as name…" as explained above. Califano teaches "a method that supports adequate security precautions to **prevent people without appropriate authorization from accessing the information contained in its databases**." in paragraph 0009. Therefore Califano's system is not always masking the patient's unique identification by the encrypted VPI to all users/portions of the system.

Argument B:

In response to Appellant's second argument, The Examiner respectfully submits that claim recites "a medical care provider server connected to said patient server through a first network, and comprising a second database, said medical care provider server receiving the vital information, and unique identifications from said first database of said patient server through the first network, storing and managing the received vital information, unique identifications, and patient data in said second database, associate each of the unique identifications with corresponding patient data, identifying corresponding patient data using each of the unique identifications, and allowing the stored and managed vital information, unique identifications, and patient data to be browsed"; Joao teaches "…a healthcare provider communication device or computer 20 (hereinafter referred to as "**provider communication device 20**") which is associated with a healthcare provider such as a healthcare professional, a hospital, a clinic, and/or any other provider of services described herein. ... The healthcare provider computer(s) 20 can communicate with, and operate in conjunction with, the central processing computer 10 and/or any of the other

computers and/or computer systems associated with any of the other individuals and/or entities which utilize and/or operate in conjunction with the present invention." In col. 13, lines 52-65; "Each of the central processing computer(s) 10, **the provider computer(s) 20, the payer computer(s) 30, the patient computer(s) 40, and/or the intermediary computer(s) 50, can transmit information to, as well as receive information from, any of the computers 10, 20, 30, 40, and 50**..." in col. 14, lines 59-64; "...**the database 10H contains data and/or information regarding patient name, patient identification information, patient social security number or other identification information**, date of birth, doctors or providers, therapists,... and any other data and/or information regarding the patient which would be needed and/or desired in order to perform any and/or all of the functions, services and/or operations described herein." In col. 16, lines 38-65. "The apparatus 100 of the present invention can utilize electronic commerce technologies and security methods, techniques and technologies, in any and/or all of the instances of data and/or information processing, and/or data and/or information transmission described herein." In col. 15, lines 54-58.

Argument C:

In response to Appellant's third argument, The Examiner respectfully submits that claim recites "the third network is configured to disallow communication among said patient server, said medical care provider server and said patient terminal" and Joao teaches "Each of the central processing computer(s) 10, **the provider computer(s) 20, the payer computer(s) 30, the**

**patient computer(s) 40, and/or the intermediary computer(s) 50, can transmit information to, as well as receive information from, any of the computers 10, 20, 30, 40, and 50**…" in col. 14, lines 59-64; "The apparatus 100 of the present invention can utilize electronic commerce technologies and security methods, techniques and technologies, in any and/or all of the instances of data and/or information processing, and/or data and/or information transmission described herein." in col. 15, lines 54-58; and also, "In any and/or all of the embodiments described herein, **access to any and/or all of the data, information, records. files, etc., which is stored in any of the databases 10H, 20H, 30H, 40H, and/or 50H, can be restricted to preserve the security and confidentiality of same**. Any of the patients, users, providers, payers, and/or intermediaries, can be provided with identification and/or other cards with any and/or all pertinent data regarding the respective individual and/or party provided on the card." In col. 39, lines 54-62. Therefore the communication between the patient or doctor terminal and either the patient server or the medical care provider server can be disallowed in Joao's system.

Argument D:

In response to Appellant's fourth argument, The Examiner respectfully submits that Joao teaches "In any and/or all of the embodiments described herein, **access to any and/or all of the data, information, records. files, etc., which is stored in any of the databases 10H, 20H, 30H, 40H, and/or 50H, can be restricted to preserve the security and confidentiality of same**. Any of the patients, users, providers, payers, and/or intermediaries, can be provided with

identification and/or other cards with any and/or all pertinent data regarding the respective individual and/or party provided on the card." In col. 39, lines 54-62. and Felsher teaches "a first unauthorized access prevention section provided in the first network (Felsher; ¶ [0197]); a second unauthorized access prevention section provided in the second network (Felsher; ¶ [0197]); a third unauthorized access prevention section provided in the third network (Felsher; ¶ [0197]); and wherein said first and third unauthorized access prevention sections have higher security levels than a security level of said second unauthorized access prevention section (Felsher; ¶ [0197])". The motivation to combine these references would be to provide a secure system for exchanging confidential information a explained above in the claim rejection.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/D. B. C./

Examiner, Art Unit 3626

/C. Luke Gilligan/

Supervisory Patent Examiner, Art Unit 3626

Conferees:

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